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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|---------------------------------|----------------------|---------------------|------------------|
| 10/584,031 | 06/22/2006 | Ralph Gronau | AP 10853 | 6888 |
| | 7590 10/02/200 L TEVES, INC. | | EXAMINER | |
| ONE CONTINI | ENTAL DRIVE | | SY, MARIANO ONG | |
| AUBURN HILLLS, MI 48326-1581 | | | ART UNIT | PAPER NUMBER |
| | | | 3657 | |
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| | | | 10/02/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|---|-------------------------------|--|--|--|
| Office Action Occurrence | 10/584,031 | GRONAU ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | MARIANO SY | 3657 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on | | | | | |
| | -· action is non-final. | | | | |
| <i>;</i> — | / | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | |
| | | 3 G. 3 . 2 . 6. | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 11-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1-18</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) ☐ Claim(s) are subject to restriction and/or | election requirement. | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 06/22/2006. | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | te | | | |

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DETAILED ACTION

1. Claims 11, 13, and 18 are objected to because of the following informalities:

Claim 11, line 1 "the pressure buildup" should be --a pressure buildup--,

Claim 11, line 8 "the auxiliary force" should be --an auxiliary force--,

Claim 11, lines 8-9 "the actuating force" should be --an actuating force--,

Claim 13, lines 3-4 "in the range of 10 ms to 100 ms" should be --in a range of 10 ms to 100 ms--,

Claim 18, line 3 "detectied" should be --detected--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Haupt et al. (US 6,318,815).

Haupt et al. disclosed, as shown in fig. 1-3, a method for controlling a pressure buildup in an electronically controllable brake system, where the brake system includes a tandem master brake cylinder 14, a vacuum brake booster 13, and at least one

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additional pressure source (pump) for brake force assistance, which is drivable by a controlling unit and the pressure of which can be applied to wheel brakes 15, 16, the method comprising the steps of detecting an approach of an operating point defined by a minimum predetermined ratio between an auxiliary force of the booster and an actuating force, detecting a pressure gradient in the master cylinder and, in the event of a detected approach of the operating unit of the vacuum booster and when a pressure gradient limit value of the detected master cylinder pressure gradient is exceeded, activating the additional pressure source for brake force assistance, thus building up additional brake pressure, see col. 3, lines 2-10 and col. 4, lines 1-19.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

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order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haupt et al.

Haupt et al. was silent to disclose wherein the pressure gradient limit value is in a range from 150 bar/s to 250 bar/s, and wherein the additional pressure source for brake force assistance is activated when the pressure gradient limit value is exceeded for a minimum time period in a range of 10 ms to 100ms.

It would have been obvious to one of ordinary skill in the art of providing the master cylinder with the pressure gradient limit value in a range from 150 bar/s to 250 bar/s and also wherein the additional pressure source for brake force assistance is activated when the pressure gradient limit value is exceeded for a minimum time period in a range of 10 ms to 100ms in order to provide additional brake force depending upon the size and weight of the vehicle.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haupt et al. in view of Quirant et al. (US 2004/0251739).

Haupt et al. failed to disclose wherein the approach of the operating unit of the vacuum booster is detected according to a stored calibrated booster characteristic curve.

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Quirant et al. teaches wherein the approach of the operating unit of the vacuum booster is detected according to a stored calibrated booster characteristic curve.

It would have been obvious to one of ordinary skill in the art to merely provide the known approach of the operating unit of the vacuum booster is detected according to a stored calibrated booster characteristic curve into the brake system of Haupt et al., as taught by Quirant et al., in order to monitor the performance of the vacuum brake booster.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Unterforsthuber (US 5,842,751)

Whaite et al. (US 5,938,297)

Sawada (US 5,954,406)

Pueschel et al. (US 6,361,126)

Dieringer et al. (US 6,450,589)

Gronau et al. (US 7,267,412)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIANO SY whose telephone number is (571)272-7126. The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi, can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/MS/

September 29, 2009

/Robert A. Siconolfi/ Supervisory Patent Examiner, Art Unit 3657